

February 19, 2013

Senator Alan Olson
Montana Senate
PO Box 200500
Helena, MT 59620-0500

Re: SB 325, Revise definition of eligible renewable resource

Dear Senator Olson:

I would like to inform you of the Western Wood Preservers Institute's (WWPI) support of SB 325, as drafted. WWPI is a non-profit trade association representing the interests of the pressure wood preserving industry in western North America that includes members in Montana.

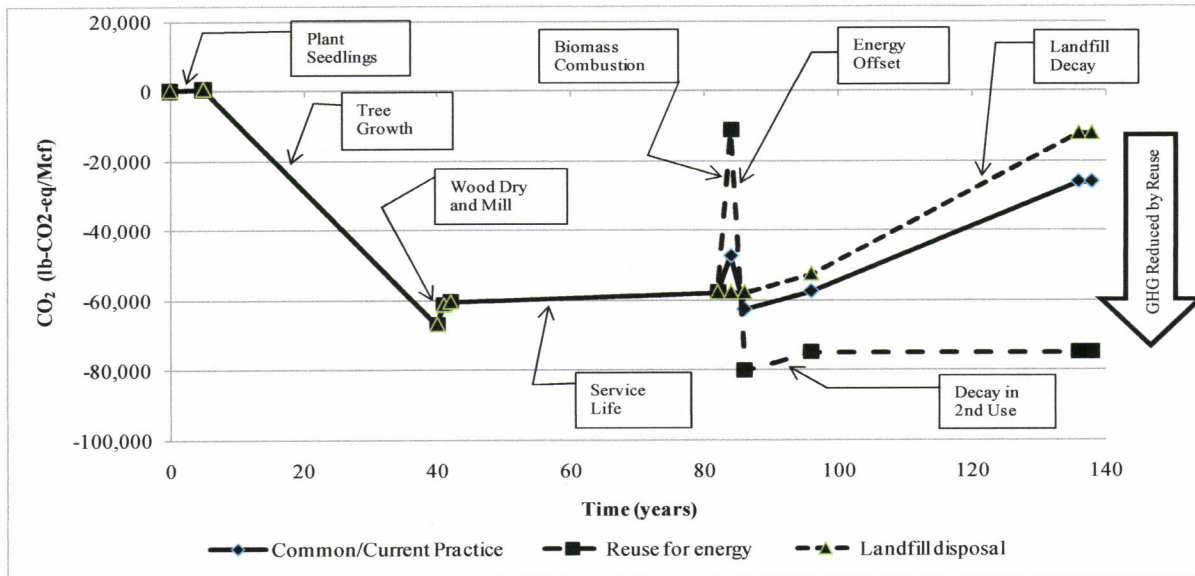
I thank you for sponsoring SB 325, An Act Revising the Definition of "Eligible Renewable Resource" for the Purposes of Administering the Renewable Portfolio Standard; Amending Section 69-3-200-3, MCA; and Providing an Immediate Effective Date. Removing the technically unsupported and prejudicial prohibition on use of used treated wood products as renewable energy will open the possibility for new or expanded business in Montana, while rewarding utilization of renewable, domestic resources.

Wood products are treated with preservative formulations to meet a variety of primary uses. For example, creosote is the primary preservative for railroad ties, pentachlorophenol-in-oil for utility poles, copper for deck lumber, and borate for interior framing in termite or decay hazard area construction. Following primary service, disposition may include other secondary uses (ties used as fence posts, for example), disposal in landfills, or reuse to produce energy. Such products have valuable energy generally equal to or better than green biomass. While the preservative chemistries present challenges to energy conversion that are real, these can be met by application of appropriate combustion or gasification technologies, emission controls, and permitting. Current regulations already require that such facilities obtain fuel specific emission permits and permit writers are diligent in ensuring that emissions will not adversely impact neighbors or the environment. Thus, the proposal will reward beneficial reuse of this valuable resource with the benefit of higher electricity value accorded renewable energy.

Earlier this year, the EPA published¹ a final rule clarifying that certain non-hazardous secondary materials that are not "traditional fuels" may be used as fuel, rather than incinerated as waste. While not yet declaring that treated wood is a non-waste fuel, regarding creosote treated railroad ties they stated "the EPA expects to propose a categorical listing for this material as well." The EPA further stated that for the treated wood in general they "may also propose a categorical listing for this broader set of treated wood material." Members of the industry are working with the Treated Wood Council, a national trade group, to accomplish these determinations.

¹ Federal Register, Vol. 78, No. 26, February 7, 2013. 40 CFR Parts 60 and 241, Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Final Amendments; Non-Hazardous Secondary Materials That Are Solid Waste; Final Rule.

In a recent article (Smith, et al. 2010) written for the WWPI, life cycle assessment procedures were used to consider the implications of using out-of-service preserved wood for energy versus landfill disposal. Each one thousand cubic feet of preserved wood (approximately 268 ties or the ties used in 1/10th mile of track) that is recycled for energy can offset approximately 49 barrels of imported oil, resulting in lower emissions of green house gases. The figure below shows the benefit clearly. A copy of this report is attached for your reference².



The potential benefits of using preserved wood, following primary service, for energy should not be excluded unnecessarily by legislation. The existing air emissions permitting process will prevent unsafe or inappropriate uses. I encourage you to make this simple, logical revision to "Eligible renewable resource" definition.

Sincerely,

Ted LaDoux

Ted J. LaDoux
Executive Director
Western Wood Preservers Institute

² Bolin and Smith, 2010. End-of-Life Management of Preserved Wood. Available from www.wwpinstitute.org.



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Summary Report
End-of-Life Management of Preserved Wood
The Case for Reuse for Energy
November 2010

Wood products are treated with wood preservatives to extend their service lives in weather-exposed or wet environments, or in environments subject to microbial and insect attack. Preservatives allow products that would otherwise fail within months or years to last from decades to nearly a century. A preserved wood product's service life continues until the product, or the structure in which it is a part, must be replaced. Outdoor decking may have a service life from five¹ to 30 years, utility poles from 15² to nearly 100 years, and railroad ties from 10³ to 60 years. Service life depends on factors including the exposure environment, applied loads, product quality, maintenance, and user preferences. Most carbon in the preserved wood product is stored at least until the end of its service life. Following primary service, some preserved wood products can be reused in less demanding applications, such as poles being used for fencing, thereby further extending their service lives. Eventually all preserved wood products must be removed. End-of-life management options for those removed preserved wood products generally include abandonment at use sites, disposal in non-hazardous landfills, or reuse as an energy source.

Wood preservatives are approved for use by the United States Environmental Protection Agency (EPA). The EPA has allowed end users of such products to make end-of-life management decisions for preserved wood products without hazardous waste restrictions. The end-of-life disposition option chosen has environmental implications, and environmental improvement opportunities are available through the proper management of preserved wood at the end of life. This paper summarizes the energy and greenhouse gas (GHG) ramifications of end-of-life management options⁴.

The cradle-to-grave life cycle of preserved wood products is similar to other wood products and agricultural products. Seeds sprout and grow using photosynthesis to extract carbon dioxide (CO₂) from the atmosphere to create hydrocarbon mass; the mature tree is harvested and converted through manufacturing processes into useful products, which serve their desired function; and then end-of-life disposition options result in some of the embodied carbon being returned to the atmosphere and some being sequestered in long-term (hundreds of years) storage. Instead of "ashes to ashes," the cycle is CO₂ to CO₂.

¹ Typically a result of home improvements that result in deck removal and not due to product failure.

² Typically a result of road widening projects and not product failure.

³ Typically a result of track realignment and not product failure.

⁴ Complete evaluation by Smith, S.T. and Bolin, C.A. 2010 entitled End of Life Management of Treated Wood is available on the WWPI website at www.wwpinstitute.org.

On average, dry wood mass is approximately 48% carbon. Each cubic foot of wood contains approximately 15 pounds of carbon representing 55 pounds of carbon dioxide removed from the atmosphere.

Estimated annual preserved wood production in the U.S. is approximately 640,000 Mcf (1Mcf = 1,000 cubic feet)⁵. Annual production volumes by preservative type are estimated to be 87,000 Mcf for creosote, 32,000 Mcf for oil-borne treatments, and 520,000 Mcf for water-borne treatment. In addition, approximately 2,400 Mcf of lumber and plywood is protected with fire retardant⁶.

According to USEPA's AP-42, Compilation of Air Pollutant Emission Factors, wood has a fuel value of approximately 9,000 BTU per pound of dry (zero moisture content) wood mass. The effective heat value is reduced by the amount of water in the wood since water must be evaporated and heated to exhaust gas temperature in a combustion process. Moisture content for wood is traditionally stated on a dry-wood basis, which is equal to the weight of water divided by the dry weight of wood. Green sapwood biomass typically contains approximately 100 percent moisture or more. At 100 percent (meaning one part water for each part dry wood mass), the contained heat is approximately 4,500 BTU per pound and the effective heat content (after heating and evaporating the water) of wood fuel is approximately 3,200 BTU per pound. Used preserved wood is typically drier than "green" wood. While it can vary greatly depending on its previous use and storage conditions, the moisture content is typically about 20 percent. Wood fuel at this moisture content has effective heat value of approximately 7,200 BTU per pound.

Based on AquAeTer's representative model, including a mix of wood species, wood preservatives either have no impact or add to the heat value when used as fuel. The heat value of wood products typically preserved with water-borne and oil-borne preservatives is approximately 7,000 BTU/pound and for creosote preserved hardwood is approximately 8,000 BTU/pound. As part of the end-of-life management assessment, AquAeTer prepared a simplified cradle-to-grave life cycle inventory (LCI) to model end-of-life alternatives for preserved wood. The end-of-life scenarios are summarized in Table 1.

Table 1 - End-of-Life Scenarios

End-of-life option	Common/Current Practice	Reuse for energy	Landfill disposal
Scenario No.	1	2	3
Secondary use with decay in place	10%	10%	10%
Reuse to energy	20%	90%	0%
Landfill disposal	70%	0%	90%

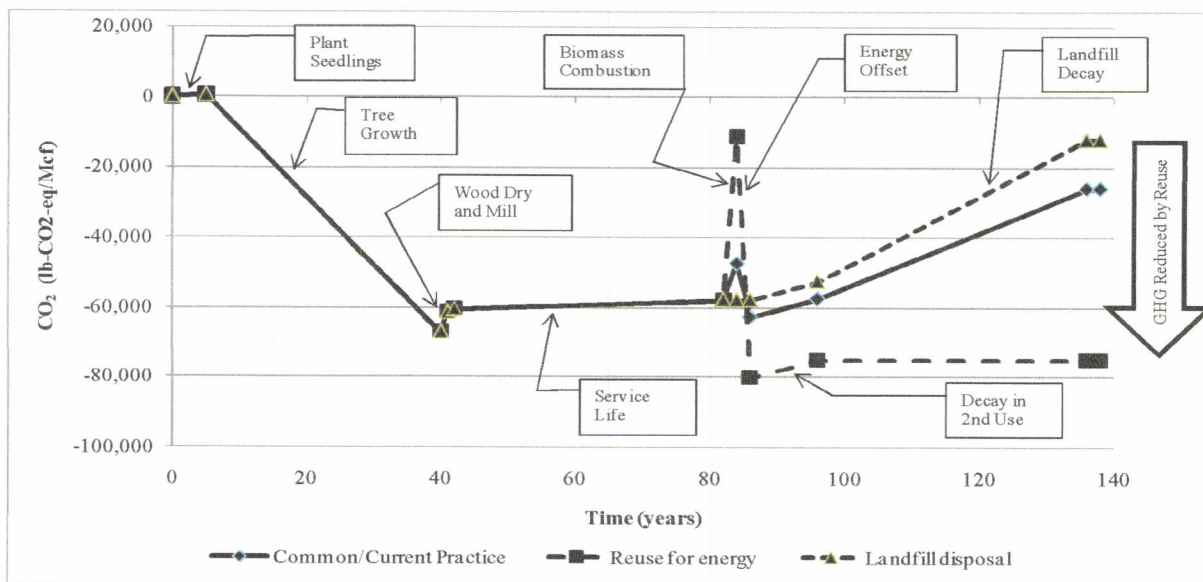
The total cradle-to-grave GHG balance, including contributions and credits from both fossil and biogenic sources is presented in Figure 1. The GHG balance is presented in units of pounds of

⁵ Smith, S.T., 2009. Economics of Treated Wood Used in Aquatic Environments. Chapter IV in Book "Managing Treated Wood in the Environment" J.J. Morrell, K. Brooks, T. LaDoux, and D. Hayward to be published by WWPI in 2010.

⁶ Vlosky, Richard P. 2009. Statistical Overview of the U.S. Wood Preserving Industry: 2007. February 16, 2009.

CO₂-equivalent per Mcf of preserved wood. Sawdust and other by-products from milling are used for energy, resulting in energy offsets. Following service life, each of the three disposition scenarios are tracked separately. The baseline represents approximately the average mix of disposition choices currently applied to the overall preserved wood market. The reuse and landfill options represent the possible extremes of choices with all preserved wood going to one or the other disposition options so that differences can be highlighted. The reduction in GHG emissions associated with reuse of preserved wood for energy amounts to approximately 70,000 pounds of CO₂-eq. per Mcf of preserved wood, compared to a reduction of approximately 10,000 pounds under the landfill scenario. The difference between the two options is highlighted by the arrow on the right side of Figure 1.

Figure 1 - Total (Biogenic and Fossil) GHG Balance for Preserved Wood



All scenarios result in reduction, rather than increase, of GHG over the life cycle of a preserved wood product. GHG accounting includes offset credits for the beneficial use of by-product bark and sawdust for process heat and energy production. The energy credits are equal and opposite to an equal heat value that would have been needed from non-renewable fossil fuel use (e.g., use of biomass fuel in a boiler instead of natural gas use).

Preservative chemicals (in preserved wood) combusted with biomass fuel need not result in higher or more hazardous emissions in comparison to other fuels. The carbon-based preservatives, such as creosote and pentachlorophenol, are destroyed by combustion in appropriate combustion devices. Metals, such as copper, chromium, arsenic, and boron, are effectively controlled by appropriate combustion and control equipment and operating procedures. It is the appropriate matching of combustion conditions and equipment with the fuel being used that affects emissions.

The beneficial reuse of preserved wood products as a non-fossil source of energy, following primary service life, is currently underutilized. Although many preserved wood products are

being reused for energy, such as combustion systems, kiln fuel or gasification, significant increased market reuse of treated wood products is possible.

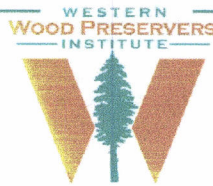
The energy contained in 640 million cubic feet (estimated annual production) of preserved wood is equivalent to approximately 32 million barrels of oil. If beneficially used, the energy would offset the fossil fuel use of approximately 646,000 U.S. citizens or about 0.21 percent of total U.S. fossil fuel use.

Since the CO₂ emissions from wood, a biogenic fuel, are neutral regarding GHG emission impacts, use of this fuel reduces GHG compared to use of equivalent amounts of fossil fuel. The offset to GHG associated with the full utilization of 640 million cubic feet of preserved wood is equal to the annual per capita GHG emissions of approximately 870,000 U.S. citizens or about 0.29 percent of the U.S. total GHG output.

The impact on U.S. landfill capacity is large. Disposal in landfills of 640 million cubic feet of preserved wood equates to approximately nine percent of annual U.S. landfill disposal volume.

Exploiting the end-of-life value of preserved wood would thus provide an expanded energy source while lowering GHG emissions and reducing landfill requirements. Federal, State, and regional governments and agencies should encourage and reward beneficial reuse of preserved wood following removal from service. Recommended actions toward this end include:

- Include preserved wood that has been removed from service within the definition of "biomass" in any laws or regulations. Any incentives used to encourage use of renewable biomass at approved or permitted facilities should apply equally to preserved wood biomass.
- Repeal laws that prevent or ban the use of preserved wood for energy.
- Do not pass laws that would regulate preserved wood removed from service.



Preserved Wood Disposal: Into Montana Landfills or Biomass

Preserved Wood as Alternative Fuel & Energy Source

Exploiting the end-of-life value of preserved wood provides option for use as an alternative fuel and energy source while lowering GHG emissions and reducing disposal in Montana landfills.

Annual preserved wood production in the U.S. is approximately 640 million cubic feet, equivalent to approximately 32 million barrels of oil. If beneficially used, the energy would offset the fossil fuel use of approximately 646,000 U.S. citizens or about 0.21 percent of total U.S. fossil fuel use.

Landfill of Treated Wood

Disposal in landfills of 640 million cubic feet of preserved wood equates to approximately 9% of annual U.S. landfill disposal volume. The EPA estimates that approximately 23% of treated wood mass will decay, with the remainder "sequestered", in landfills. Of that 17% CO₂ and 6% methane will be released to the atmosphere. Methane has 21 times the global warming impact of CO₂, the 6% methane is equivalent to 126% of the original wood carbon. Thus 143% of the GHG removed by growth of wood is returned to atmosphere. Of the 33 Montana Landfills, methane is only captured from landfills in Billings, and Kalispell. In these two landfills a net reduction, of GHG over the life cycle of wood is accomplished.

Biomass Burning of Treated Wood

Currently, if treated wood is not placed in a Montana Landfill after service life, it is exported out of state for biomass burning. Allowing the option to burn treated wood in Montana will allow for future innovation, investment and create jobs. Biomass combustion plants that can handle treated wood biofuel without releasing hazardous air pollutants include: carbon systems, cement kilns, and gasification.

Environmental Controls & Effects

1. **Creosote** (Removed from use as railway ties, marine piling, and utility poles.)
PAH emissions, from creosote-preserved wood burned in industrial or commercial boilers, are minimal. Total PAH emissions are less when burning preserved wood than when burning green wood.
2. **Pentachlorophenol** (Removed from use as utility poles, bridge and walkways.)
Greater than 99.99% is effectively destroyed by combustion in a conventional wood fired boiler. Boilers with flue gas acid treatment technologies such as scrubbers should be used to remove hydrochloric acid.
3. **CCA** (Removed from use as utility poles, highway posts, guardrails, and agricultural fencing.)
99.9% to 100% control of arsenic, chromium, copper and lead for emissions relative to feed rates. 99.99% of metals from preserved wood remain with the ash waste stream.

"To realize the full potential of preserved wood utilization for energy, laws and regulations should be revised to remove disincentives and bans on, while also expanding incentives for, beneficial reuse of treated wood."

Definition of Biomass

Current state definition states: "low-emission, nontoxic biomass based on dedicated energy crops, animal wastes, or solid organic fuels from wood, forest, or field residues, except that the term *does not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chroma-arsenic*;

Recommended definition would state: "low-emission, nontoxic biomass based on dedicated energy crops, animal wastes, or solid organic fuels from wood, forest, or field residues, *including wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic provided the energy producing facility complies with all applicable requirements and permits for combustion per USC Title 42, Chapter 85 and MTEQ Chapter 8, Air Quality, Subchapter 7.*

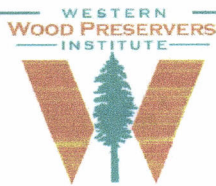
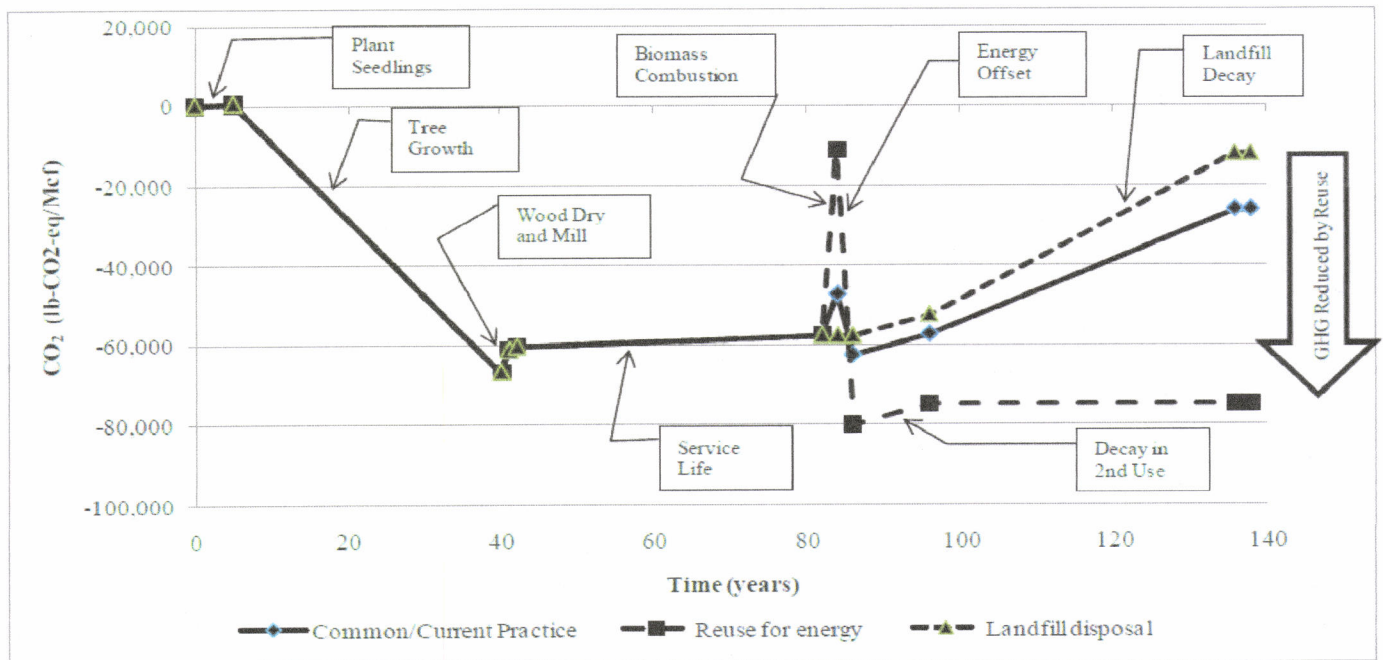


Figure 1 – Total (Biogenic and Fossil) GHG Balance for Preserved Wood



“End-of-Life Management of Preserved Wood” prepared by AquAeTer, Inc. *Chris A. Bolin and Stephen T. Smith*
November 2010 for WWPI.



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40 CFR Parts 60 and 241

Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Final Amendments; Non-Hazardous Secondary Materials That Are Solid Waste; Final Rule

biomass that the EPA has determined to be a non-waste fuel (e.g., bagasse). The commenter also notes that there are contracts in place for livestock and poultry producers to supply manure to the combustor.

Regarding contaminants in manure, the commenter states that the amount of contaminants is limited because the vast majority of applicable contaminants are directly related to the contaminants contained in the biomass consumed by the animals. The EPA has not presented any evidence that facilities are combusting manure in order to discard chlorine or nitrogen, the two contaminants identified by the EPA. These concentrated contaminants are no different than what occurs in the production of "byproducts of ethanol natural fermentation processes," which the EPA is now proposing to include in the definition of "clean cellulosic biomass." Based on a "balancing of the legitimacy criteria and other such relevant factors," the EPA's new standard, animal manure should be included in the 40 CFR 241.4(a) fuels list, along with resinated woods and scrap tires.

Response: We disagree with the commenter on several points and do not believe that the case has been made to include animal manure as a categorical non-waste fuel in 40 CFR 241.4(a). First, in the 2011 NHSM final rule, we previously determined that animal manure that is used as fuel, "as generated," would not satisfy the legitimacy criteria. This conclusion was based on the fact that such material likely would not satisfy the meaningful heating value and contaminant legitimacy criterion.¹²⁸ Thus, we believe that the burning of such materials (as generated) would not be legitimate and would be seen as burning for discard. Further, the agency has never stated that a NHSM, including animal manure, has to be landfilled in order to be discarded, as the commenter implies. Regarding the use of manure as fertilizer, we have been clear that this rulemaking does not address that secondary use. The 2011 NHSM final rule states, "We recognize that manure may also be beneficially used in other end uses, such as a fertilizer * * * EPA is not making any determination whether non-hazardous secondary materials are or are not solid wastes for other possible beneficial end uses. Such beneficial use determinations are generally made by the states for these other beneficial uses, and EPA will continue to look to the states to make such determinations."¹²⁹

The commenter notes additional plans for animal manure energy projects; however the fact that there are plans for future projects does not support a categorical non-waste determination today. As the EPA has acknowledged, facilities may be able to demonstrate that they satisfy the legitimacy criteria, either through a self-determination if the manure remains within the control of the generator or through the § 241.3(c) non-waste determination petition process. Thus, any future energy project using animal manure as fuel could utilize either of these options for determining that the manure is a non-waste fuel, as appropriate.

Regarding the commenter's points related to meaningful heating value of dried manure, the fact that dried manure may have a greater Btu value than bagasse is not directly on point. To demonstrate that a NHSM has meaningful heating value when used as a fuel, a facility does not compare relative Btu/lb of the NHSM against other traditional fuels, which themselves have a wide range of heating values. Rather, consistent with other EPA rulemakings, we have established 5,000 Btu/lb as a benchmark for demonstrating that a NHSM has meaningful heating value. Thus, to meet the meaningful heating value legitimacy criterion, the material would need to meet an "as fired" heating value of 5,000 Btu/lb, or if lower than 5,000 Btu/lb, as fired, a person would need to demonstrate that the ERU can cost-effectively recover meaningful energy from the NHSM used as a fuel.¹³⁰ We also note that the EPA did not reopen the meaningful heating value for fuels, as codified in 40 CFR 241.3(d)(1)(ii), in the December 23, 2011, proposed rule. Thus, in order to meet this criterion, the dried manure would need to meet an "as fired" heating value of 5,000 Btu/lb, or if lower than 5,000 Btu/lb, the facility would need to demonstrate that the ERU can cost-effectively recover meaningful energy from use of manure as a fuel.

Regarding the commenter's statement regarding contracts between livestock and poultry producers and combustors, first we would note that no information has been provided to indicate who has entered such contracts or how many such contracts there are to consider this factor. However, as we have stated elsewhere in this preamble, contractual arrangements can be used as evidence that the material is managed as a valuable commodity and that discard is not occurring when a material is transferred beyond the control of the

generator. However, the fact that there is a contractual relationship by itself is not dispositive that a material is not a waste, as there are contracts between parties to remove and dispose of wastes.

We also believe that the commenter's statements that the concentrated levels of contaminants are no different than what occurs in the production of "byproducts of ethanol natural fermentation processes" is not supported by any information or data. That is, other than the general statement, the commenter has not provided contaminant data, for either animal manure or byproducts of ethanol natural fermentation processes, for the agency to analyze and compare.

Thus, we have determined based on the lack of any information or data that animal manure should not be listed as a categorical non-waste fuel in § 241.4(a).

Comment: In the event that the agency does not list animal manure as a categorical non-waste fuel, the EPA could alternatively decide that processing of animal manure by drying, constitutes "sufficient processing," such that previously discarded manure could be considered recovered for energy recovery, just like scrap tires could be processed and burned as a non-waste.

Response: In the December 23, 2011 proposal, the agency did not solicit comment on the definition of "processing," as codified in 40 CFR 241.2. Thus, this comment is beyond the scope of the rulemaking and will not be addressed in today's final action.

d. Other Materials for Which Additional Information Was Not Requested

In the December 2011 proposal, the agency solicited comment on a focused list of NHSMs and, in particular, whether these NHSMs would be appropriately included in the categorical list of non-waste fuels that the agency was proposing in 40 CFR 241.4(a). Specifically, the agency proposed and/or invited comment and additional information regarding potential categorical non-waste determinations for resinated wood, scrap tires managed pursuant to established tire collection programs, pulp and paper sludges, and coal refuse recovered from legacy piles.

Although comment was requested only for these specific materials, the agency received comments that many other NHSMs be listed as categorical non-wastes for which it did not request additional information as a part of this rulemaking. As we have discussed elsewhere in today's preamble, we will not be responding to such comments and issues that are beyond the scope of

¹²⁸ See 76 FR 15480–15481.

¹²⁹ 76 FR 15482.

¹³⁰ See 76 FR 15541.

today's narrow rulemaking. We would also note that since the agency did not specifically solicit comments on these additional materials or propose that these NHSMs should be categorically listed in 40 CFR 241.4(a), the Agency will be going through notice and comment rulemaking before making a final decision. However, we would like to note two additional NHSMs—paper recycling residuals and construction and demolition wood processed pursuant to best practices that, based on information provided to the agency,¹³¹ we now believe are good candidates and expect to propose categorical listings in 40 CFR 241.4(a) in the near future for these two materials. With respect to a third NHSM—creosote-treated railroad ties, the Agency has recently received a draft petition from The American Forest & Paper Association and the American Wood Council seeking a categorical listing for these materials. As noted below, the Agency has requested additional information from the petitioners with regard to their request. If the additional information supports the representations made in the petitioners' draft December 6, 2012 petition, the EPA expects to propose a categorical listing for this material as well.¹³²

Paper Recycling Residuals

The first of these is paper recycling residuals (including old corrugated cardboard (OCC) rejects). In the 2011 NHSM final rule, EPA determined that paper recycling residuals, referred to as OCC rejects, are not discarded when used under the control of the generator, such as at pulp and paper mills, since

¹³¹ Comments on December 23, 2011 proposed rule supporting a categorical non-waste for paper recycling residuals: American Forest & Paper Association, et al. EPA-HQ-RCRA-2008-0329-1946-A1; Georgia-Pacific LLC (GP) EPA-HQ-RCRA-2008-0329-1902-A1; National Alliance of Forest Owners (NAFO) EPA-HQ-RCRA-2008-0329-1950-A2; Packaging Corporation of America (PCA) EPA-HQ-RCRA-2008-0329-1966-A1; and United Steelworkers (USW) EPA-HQ-RCRA-2008-0329-1910-A1. Comments supporting a categorical non-waste for paper recycling residuals and C&D wood: American Forest & Paper Association, et al. EPA-HQ-RCRA-2008-0329-1946-A1; Construction Materials Recycling Association (CMRA) EPA-HQ-RCRA-2008-0329-1928-A1; Covanta Energy Corporation (Covanta) EPA-HQ-RCRA-2008-0329-1893-A; Energy Recovery Council (ERC) EPA-HQ-RCRA-2008-0329-1927-A1; Georgia-Pacific LLC (GP) EPA-HQ-RCRA-2008-0329-1902-A1; Michigan Biomass EPA-HQ-RCRA-2008-0329-1905-A1; National Alliance of Forest Owners (NAFO) EPA-HQ-RCRA-2008-0329-1950-A2; United Steelworkers (USW) EPA-HQ-RCRA-2008-0329-1910-A1; Waste Management (WM) EPA-HQ-RCRA-2008-0329-1957-A2; and Weyerhaeuser EPA-HQ-RCRA-2008-0329-1930-A1.

¹³² See draft letter from Paul Noe to Administrator Lisa Jackson, December 6, 2012, (item to be placed in the docket for today's rule).

these non-hazardous secondary materials are part of the industrial process.¹³³ Regarding the legitimacy criteria, the Agency found that these materials meet the criteria with respect to management as a valuable commodity and used as a fuel when burned on-site. In addition, the Agency found that the contaminant levels in these materials are comparable to those in traditional fuels. With respect to the meaningful heating value criterion, the Agency determined that OCC rejects meet this criterion if it can be demonstrated that the combustion unit can cost-effectively recover energy from these materials.¹³⁴

Since publication of the March 2011 rule, the Agency has received additional information regarding the cost effectiveness of paper recycling residuals use as a fuel, including amounts of paper recycling residuals replacing traditional fuels at paper mills and percentages of residuals generated that are combusted as fuel. In general, this information also indicates that this material is primarily combusted as a fuel on-site or within the control of the generator.¹³⁵ We have asked the industry for information to confirm this.

EPA believes the information received to date would tend to support a categorical determination of these residuals as non-waste fuels. For residuals that are transferred offsite, the Agency would like additional information about residuals that are also burned as a fuel at facilities that are not under the control of the generator, including information as to how and where they are burned and whether they are managed as a valuable commodity. If the Agency receives information confirming treatment of these materials offsite, the Agency would expect to include these residuals in a subsequent rulemaking.

Construction and Demolition Wood Processed Pursuant to Best Practices

The second of these NHSMs is construction and demolition (C&D) wood processed pursuant to best practices and produced and managed under the oversight of a comprehensive collection system or contractual arrangement. In the March 2011 final rule, we determined that C&D wood that is sufficiently processed can be a non-waste fuel.¹³⁶ The Agency has received additional information since the

¹³³ 76 FR 15487.

¹³⁴ For a discussion of OCC rejects, see 76 FR 15486-7.

¹³⁵ See "Generation, Management, and Processing of Paper Processing Residuals" (Industrial Economics, October 26, 2012) (these items will be placed in the docket.)

¹³⁶ See 76FR 15485

issuance of that rule on specific best management practices used by suppliers/processors of C&D wood. Such practices include processing to remove contaminants. EPA believes the information received to date would tend to support a listing of these materials as a categorical non-waste fuel and expects to propose that listing in a subsequent rulemaking.

Other Materials Under Consideration

The American Forest & Paper Association and the American Wood Council submitted a draft petition to EPA on December 6, 2012 seeking a categorical listing for creosote-treated railroad ties.¹³⁷ This draft petition lists their bases for the determination, with supporting information.

The information included amounts of railroad ties combusted each year and value of the ties as fuel. Overall, the petitioners believe the information demonstrates that these materials are non-waste fuels and would allow EPA to categorically list this material, balancing the legitimacy criteria with other relevant factors. The draft petition provides information representing a determination that the material has high Btu value, and that the material satisfies the legitimacy criteria. The Agency is still in the process of reviewing the petition. However, in order to inform the scope of the non-waste category, we have also asked the petitioners to provide additional information, including:

1. A list of industry sectors, in addition to forest product mills, that burn railroad ties for energy recovery
2. The types of boilers (e.g., kilns, stoker boilers, circulating fluidized bed, etc.) that burn railroad ties for energy recovery
3. The traditional fuels and relative amounts (e.g., startup, 30%, 100%) of these traditional fuels that could otherwise generally be burned in these types of boilers
4. The extent to which non-industrial boilers (e.g., commercial or residential boilers) burn railroad ties for energy recovery
5. Laboratory analyses for contaminants known to be present in creosote-treated railroad ties or known to be significant components of creosote, specifically polycyclic aromatic hydrocarbons (i.e., PAH-16), dioxins, dibenzofurans, hexachlorobenzene, biphenyl, quinoline, cresols, and 2,4-dinitrotoluene.

¹³⁷ Letter from American Forest & Paper Association and American Wood Council to Lisa Jackson, dated December 6, 2012 (a copy of this letter can be found in the docket for today's rule)

Assuming that the additional information supports and supplements the representations made in the petitioner's December 6, 2012 draft petition, the EPA also expects to propose a categorical listing for this material. To the extent that petitioners would like to provide additional information, the Agency will consider such information as well.

EPA has also received a related letter from the Treated Wood Council asking that nonhazardous treated wood be determined as a categorical non-waste, a broader category that would include creosote-treated ties.¹³⁸ EPA is in the process of reviewing this letter, and may also propose a categorical listing for this broader set of treated wood material.

Finally, we would note that if any person provides sufficient information to EPA regarding any other NHSM, EPA would also consider listing such material(s) categorically, pursuant to 40 CFR 241.4(b).

6. Streamlining of the 40 CFR 241.3(c) Non-Waste Determination Petition Process

In the proposed rule, the EPA asked for comments on streamlining or other improvements to the existing provision for non-waste determinations codified at 40 CFR 241.3(c).

The agency requested comment on whether the EPA's grant of the petition should apply as of the date that the petition was submitted to the agency.¹³⁹ The agency also requested additional comment on whether any other changes could be made to the non-waste determination petition in order to streamline the process, while at the same time provide the EPA with the opportunity to ensure that such NHSMs are not being discarded. For example, the EPA requested comment on whether public comment should be sought on each individual petition.¹⁴⁰

Comment: Concerning the request for comment regarding when a petition determination would apply, the agency received several comments. Specifically, the agency requested comment on whether the EPA's grant of the petition should apply as of the date that the petition was submitted to the agency. Commenters agreed that a non-waste determination under 40 CFR 241.3(c) should be retroactively applied to the date the petition was submitted.

Commenters were concerned about the timeliness of the EPA's decision on these determinations and on the uncertainty surrounding the usage of the NHSMs while a non-waste determination petition is pending. The commenters argue that if a NHSM is determined to be non-waste, the combusted NHSM in question was also non-waste prior to the determination.

Response: The agency understands the interests of petitioners awaiting an agency decision on the status of materials, while a 40 CFR 241.3(c) petition is being considered. In order to lessen the uncertainty surrounding the regulatory status of a particular material, the agency will utilize the date the petition was submitted as the date that the combusted materials will be considered a non-waste if the agency grants the petition.

Comment: Many commenters indicated concern that the petition process could take excessive time for the agency to reach a decision. They requested self-imposed timeframes for the EPA's granting/denying requests and a shorter length of time for the notices to be open for public comment (or omit it altogether). The combustors stated they need quick decisions in order to comply with the CAA regulations and to make efficient business decisions.

Response: The agency considered the commenters' suggestion, but decided not to impose a deadline on its decision because there are many factors beyond its control, including how long it takes for the petitioner to submit a complete petition to EPA for evaluation. We would note, however, that even though the NHSM rule will become effective on April 8, 2013, for all practical purposes, existing facilities that currently burn NHSMs from off-site sources will have a substantial amount of time to submit and have the EPA process a non-waste determination petition before having to comply with the CAA emission standards, as the compliance date for existing CISWI sources subject to CAA 129 standards is 5 years after the date of publication of the CISWI final rule or 3 years after the state plan is approved, whichever happens earlier and February 7, 2016, to comply with the Boiler MACT rule.¹⁴¹ ¹⁴² Thus, we believe that there will be more than adequate time for persons to determine whether or not a NHSM sent to a combustion unit not

under the control of the generator has not been discarded and meets the legitimacy criteria, prepare and submit a non-waste determination petition to the EPA, have the EPA process the petition, including soliciting comment on the EPA's proposed determination, and make a final decision.

In regard to the comment on reducing the time the petition application is open for public comment, the agency decided that the comment period shall remain at 30 days but the regulatory text is changed from "at least 30 days" to "30 days" in order to promote clarity, while affording an opportunity for public comment.

Comment: One commenter strongly encouraged the agency to develop and deploy an on-line form to identify materials for non-waste determinations. Commenters also noted that the EPA should provide more detailed information about how the determinations are made (particularly for the comparable contaminant determinations).

Response: The agency will consider the development of a form to identify the specific information needed to determine whether a NHSM meets the legitimacy criteria and other provisions. If the agency develops such a form, it would be made available on the NHSM Web site. Please note that traditional fuel data (including tables for traditional contaminants) are available to the public, which they may find useful in assessing the contaminant legitimacy criteria. Refer to those tables in "Contaminant Concentrations in Traditional Fuels: Tables for Comparison" currently posted on the NHSM web site at <http://www.epa.gov/osw/nonhaz/define/index.htm>. That document will aid in comparing the concentration of contaminants in their NHSMs to concentration of contaminants in traditional fuels. In addition, rule clarification letters and petition findings are also posted on the Web site when finalized.

Comment: A commenter suggested that the non-waste petition process should allow for "balancing" of legitimacy criteria similar to that included for categorical determinations in 40 CFR 241.4.

Response: Under 40 CFR 241.4 of the proposed regulation, the EPA can balance the legitimacy criteria with other relevant factors in making categorical non-waste determinations. As the commenter points out, we have not discussed the applicability for similar balancing under 40 CFR 241.3 non-waste determination petitions. The EPA distinguished between 40 CFR 241.3 and 40 CFR 241.4 because in the

¹³⁸ Letter from Jeffrey Miller, Treated Wood Council to Lisa Feldt, December 17, 2012. (a copy of this letter can be found in the docket to today's rule) Additional supporting information is found in the Comments of Treated Wood Council, dated Feb. 20, 2012)(EPA-HQ-RCRA-2008-0329-1897.

¹³⁹ See 76 FR 80473.

¹⁴⁰ See 76 FR 80474.

¹⁴¹ We recognize that new sources that are coming online that will have to comply with these rules much sooner than do existing sources. As such, the Agency will consider prioritizing the processing of non-waste petitions it has received from new sources as appropriate.

¹⁴² Note that the compliance date for the Area Source Boiler Rule is March 21, 2014.